



# Grand Street Designing for Safety Improvements: Shore Line to Clement

Community Workshop  
May 31, 2023



# Agenda

- |                |   |
|----------------|---|
| <b>6:05 pm</b> | <b>Welcome &amp; Background</b> - Jennifer Ott, City Manager  |
| <b>6:10 pm</b> | <b>Presentation</b> - Andrew Thomas, Planning, Building & Transportation Director & David Parisi, Parametrix <ul style="list-style-type: none"><li>• Why Grand St is important</li><li>• Alternatives for full corridor</li><li>• Preliminary staff conclusions</li></ul> |
| <b>6:30 pm</b> | <b>Open House</b> <ul style="list-style-type: none"><li>• View and comment on alternatives</li><li>• Ask questions of multiple staff available</li><li>• Dialogue with others</li></ul>   |
| <b>8:00 pm</b> | <b>Adjourn</b>  |

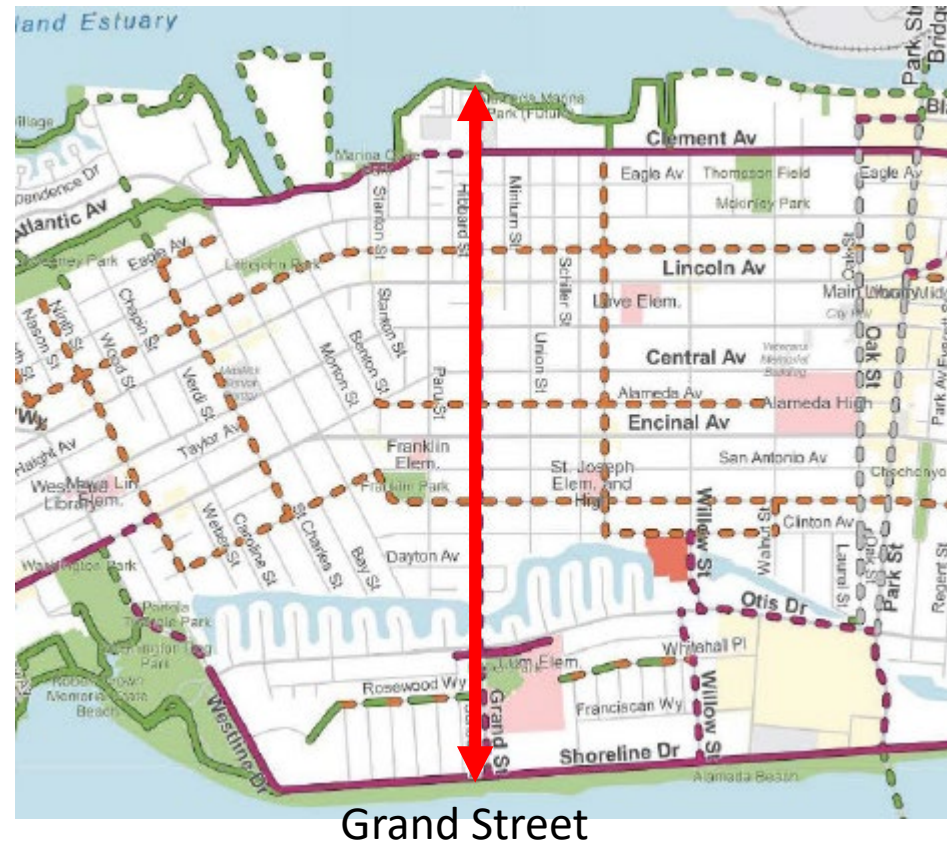
# Background

- **November 2022** - Council approved street designs from Shore Line to Encinal as part of a re-paving project
  - Constrained by curb-to-curb dimension
  - Prior to Active Transportation Plan approval
  - Staff committed to review entire corridor
- **January 2023** - Staff retained new transportation consultant to review entire corridor
  - Direction to explore alternatives without budget and curb-to-curb constraints
  - Paid special attention to citywide importance of unique north-south connection
- **January – June 2023** - Staff and consultant study corridor alternatives and gather community input
  - Staff considering recommendation of alternative design

# Corridor Study Goals - Updated

- **Improve safety for all consistent with recently approved Active Transportation Plan and other policy goals**
  - People walking, bicycling and driving, and youth, seniors and those with disabilities
- **Design for the full length of Grand Street corridor from Shore Line to Clement**
  - Conditions vary over corridor's 20 blocks
- **Consider the full width of the public right-of-way, including sidewalks**
  - Not just the street from curb-to-curb
- **Consider costs and funding**
  - Don't lose the \$827,000 in grant funds due to delays and balance costs & benefits
- **Consider phased construction over time**
  - Deliver project in phases (similar to Cross Alameda Trail implementation)
- **Recommendations to City Council on one or more phases in July 2023**
  - Important to move quickly to address safety concerns

# Why is Grand Street important?



- A critical connector:
- Northern to southern waterfront
  - Cross Alameda Trail to Shore Line Dr, two major east-west, low stress bikeways
  - One of only two north/south streets between Eighth St and Park St

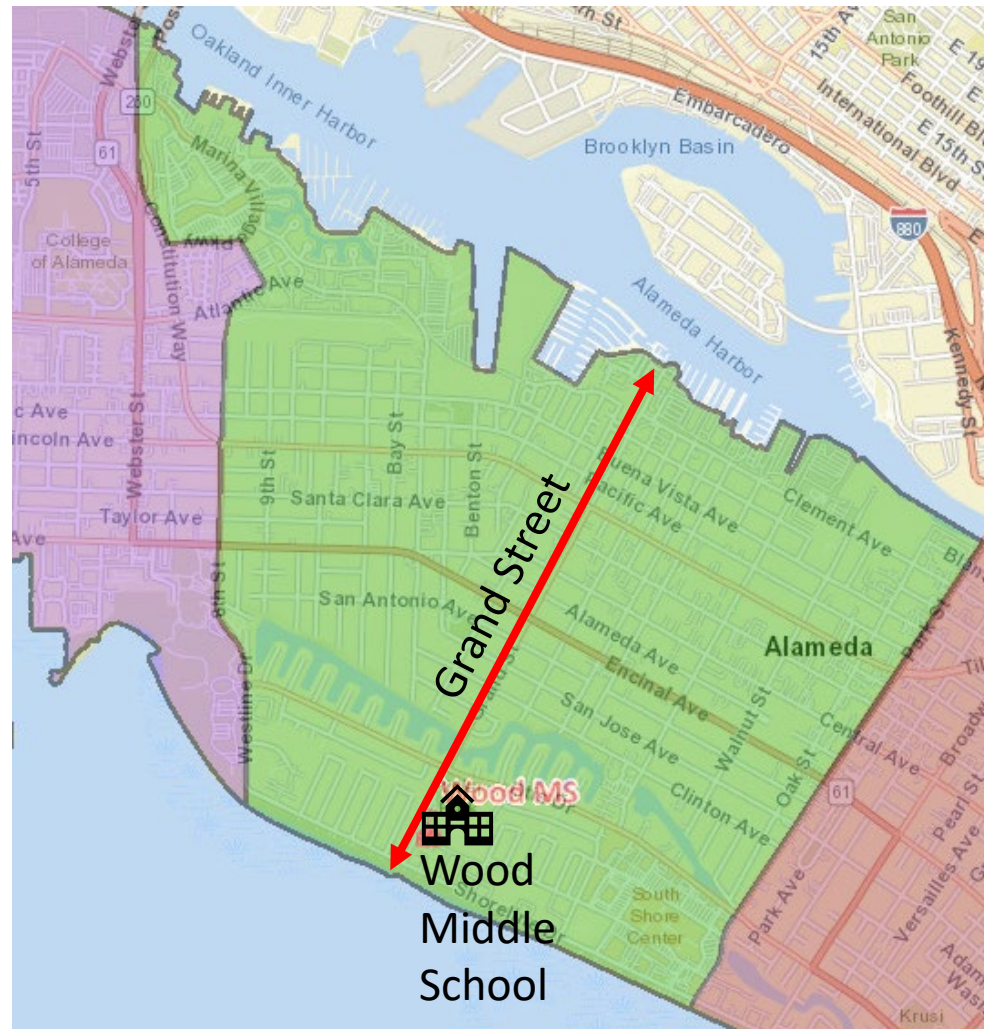


# Important Link in Citywide Low Stress Network



# A Key School Access Route

- Grand St travels through the center of Wood Middle School enrollment area (shown in green)



Map of AUSD middle school enrollment areas



# A High Injury Corridor

**City of Alameda, *Vision Zero Action Plan***

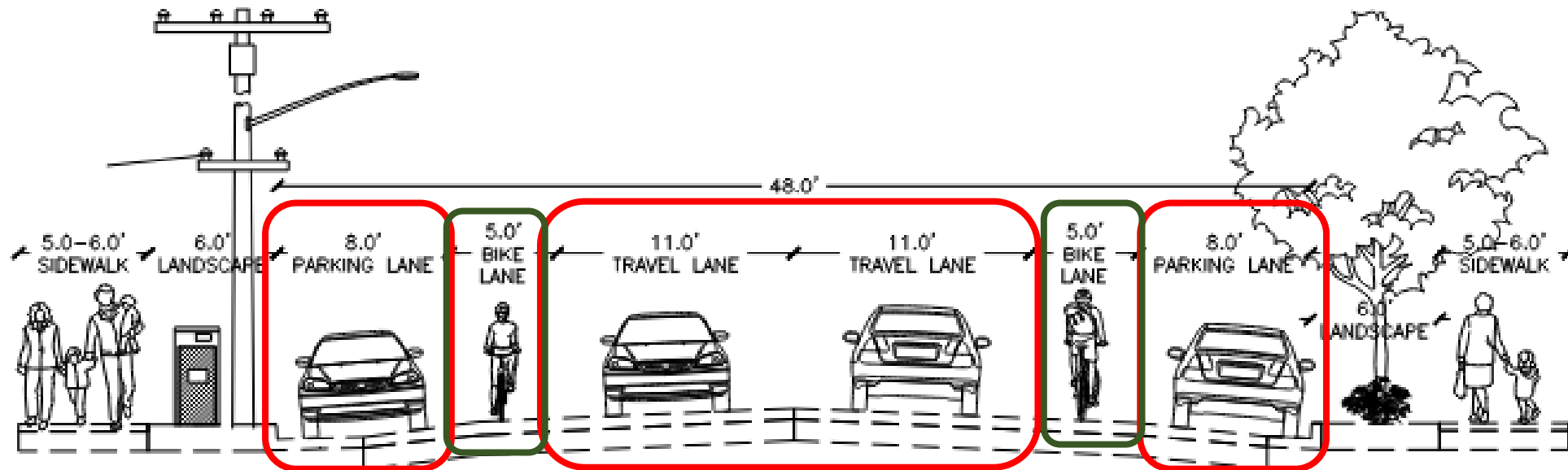
**Countywide, *Alameda CTC Countywide Active Transportation Plan***

**Region, *MTC regional High Injury Network***





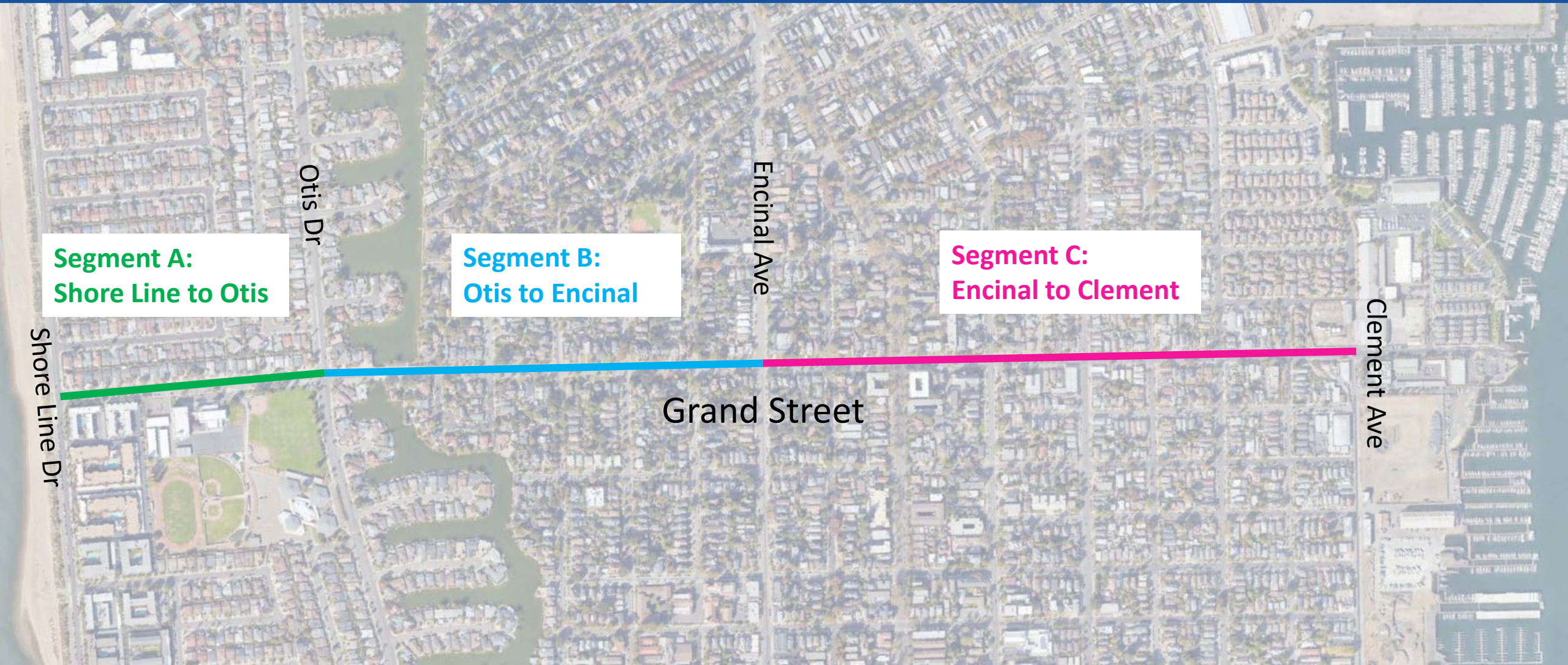
# Grand Street Today



TYPICAL SECTION  
EXISTING CONDITIONS

- 2 Travel lanes (11')
- 2 Parking lanes (8')
- 2 Sidewalks (5-6')
- 2 Standard unprotected bike lanes (5')
- 2 Landscaping areas (6')
- Street is 48' wide (curb to curb)

# Grand St Improvements: Three Segments





# Corridor Study Results: 4 Alternatives to Consider

## Council-Approved Design (November 2022):

- *Segment A: Shoreline to Otis:*
  - 2-way bikeway on east side next to Wood School
- *Segment B: Otis to Encinal:*
  - 1-way parking/bollard-protected bikeways on each side of street
- *Segment C: Encinal to Clement:* TBD with further study

**Alternative #1:** 2-way bikeway for whole corridor (Shoreline to Clement)

**Alternative #2:** 1-way raised bikeways on each side of street (Otis to Clement)

**Alternative #3:** Enhanced raised 1-way bikeway (Otis to Clement)

# Alternatives are similar in many ways

	Council Approved Design	Alternative 1	Alternative 2	Alternative 3
2 travel lanes	✓	✓	✓	✓
Pedestrian improvements	✓	✓	✓	✓
Low stress, separated bike lanes	✓	✓	✓	✓
Bikeway raised to sidewalk level		✓	✓	✓
Auto parking on both sides of street, at the curbs		✓	✓	✓
Curb to curb street width narrowed		✓	✓	✓

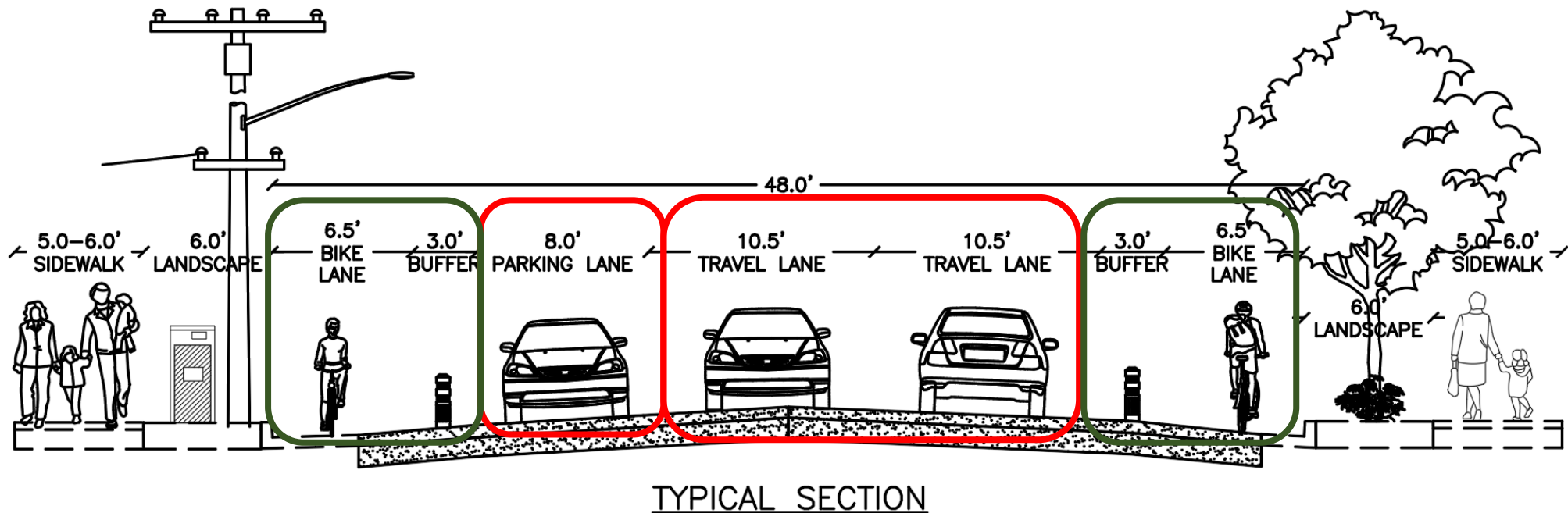


# Council-Approved design for Segment A: Shore Line to Otis 2-way bikeway



- Parking/bollard-protected, on east side of street, next to Wood School
- Fully funded using \$827,000 grant funding
- Can be ready for construction in 2024
- No alternatives developed for this segment

# Council-Approved design for Segment B: Otis to Encinal 1-way bikeways



- Bikeways on both sides of street, protected by parked cars or bollards
- Parking for half blocks only, on each side of street ("chicane")
- Can be ready for construction in 2024

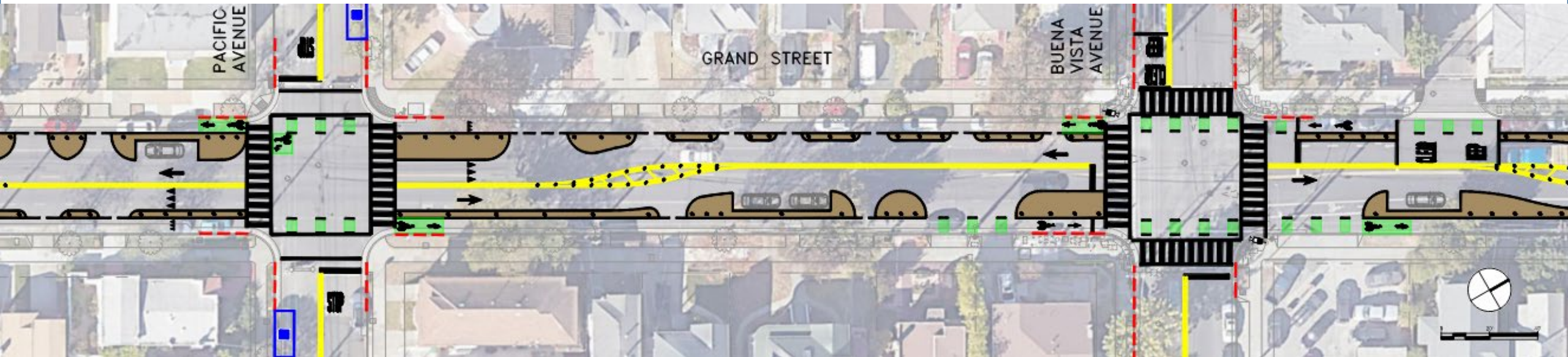


# Council-Approved design for Segment B: Otis to Encinal 1-way bikeways





# Council-Approved design *extended North* Segment C: Encinal to Clement 1-way bikeways



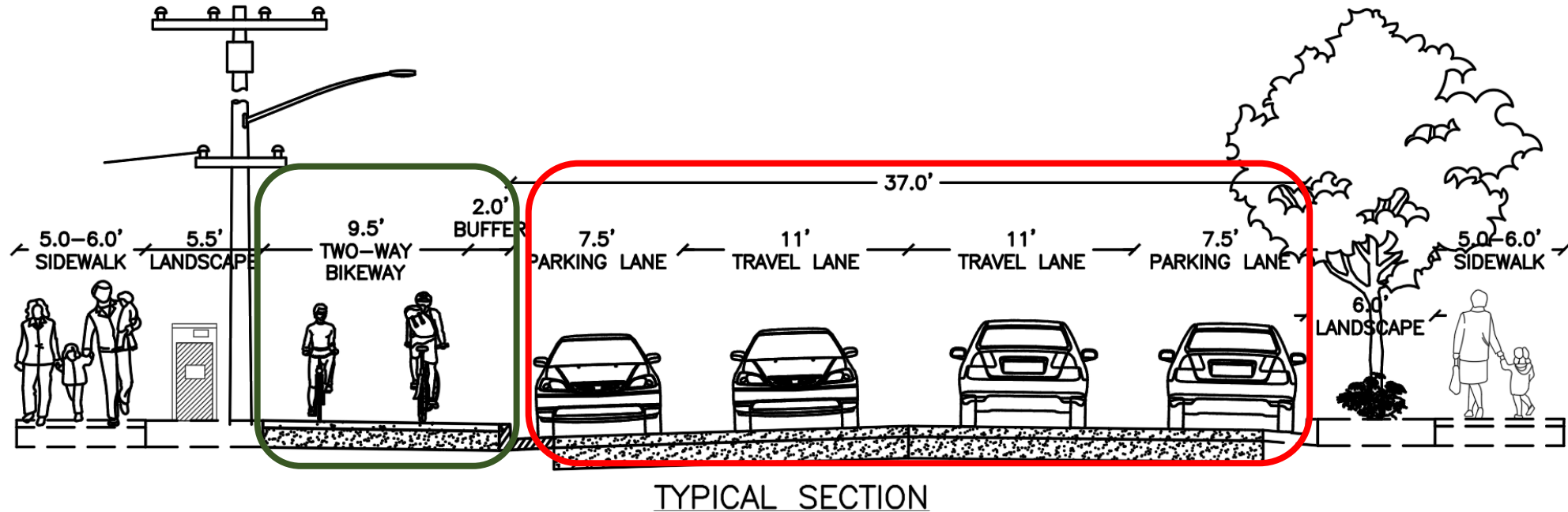
- More frequent driveways from Encinal to Clement, so more parking impacts
- Up to 75% parking loss (as compared to Otis to Encinal at 60%)
- If parking is on one side of street only, then less parking loss (50%)



# Council-Approved design *extended North* Segment C: Encinal to Clement 1-way bikeways



# Alternative #1: Raised 2-way Bikeway



- Moves curb 11 ft. to create 2-way raised bikeway on east side of Grand
- Street width curb to curb is reduced from 48' to 37' wide
- Parking on both sides, at curb



# Alternative #1: Raised 2-way Bikeway



## Pros

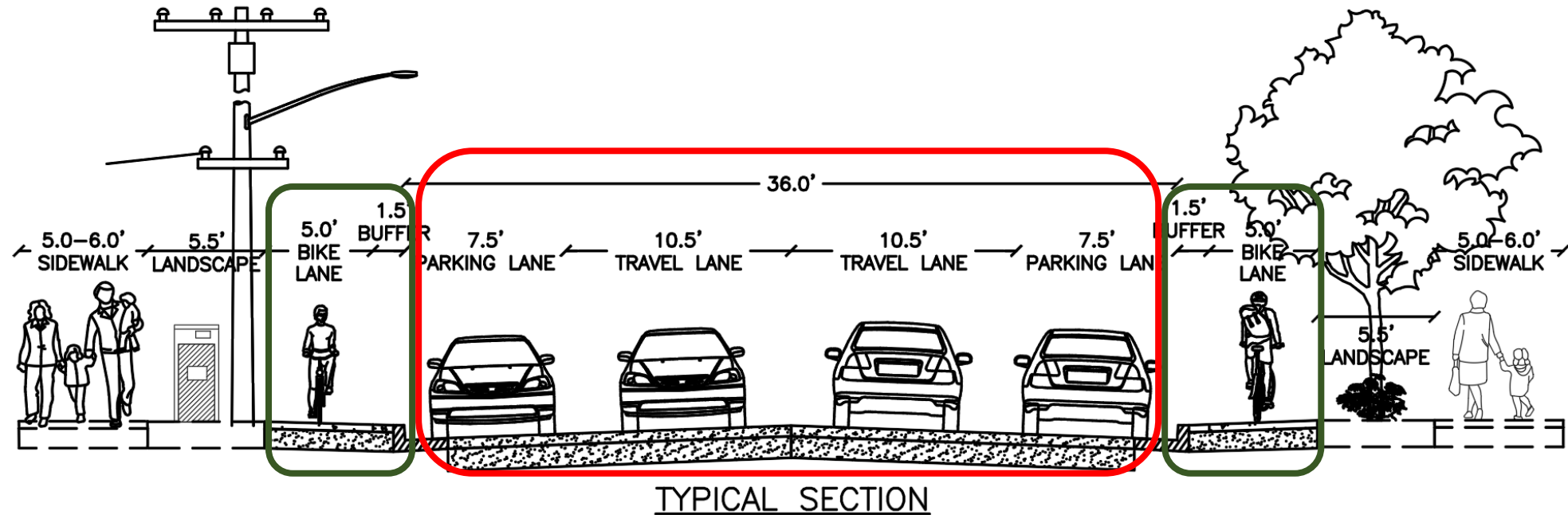
- More separation between bicyclists and cars
- Less striping and plastic bollards
- Parking at curbs
- Less parking loss (5% to 15% total reduction)

## Cons

- Intersections more complicated and costly than 1-way bikeways
- More expensive than Council-Approved design



# Alternative #2: Raised 1-way Bikeways



- Moves curbs 6' on both sides of street, for 1-way raised bikeway on each side of street
- Street is reduced from 48' to 36' wide
- Parking on both sides, at curbs

# Alternative #2: Raised 1-way Bikeways



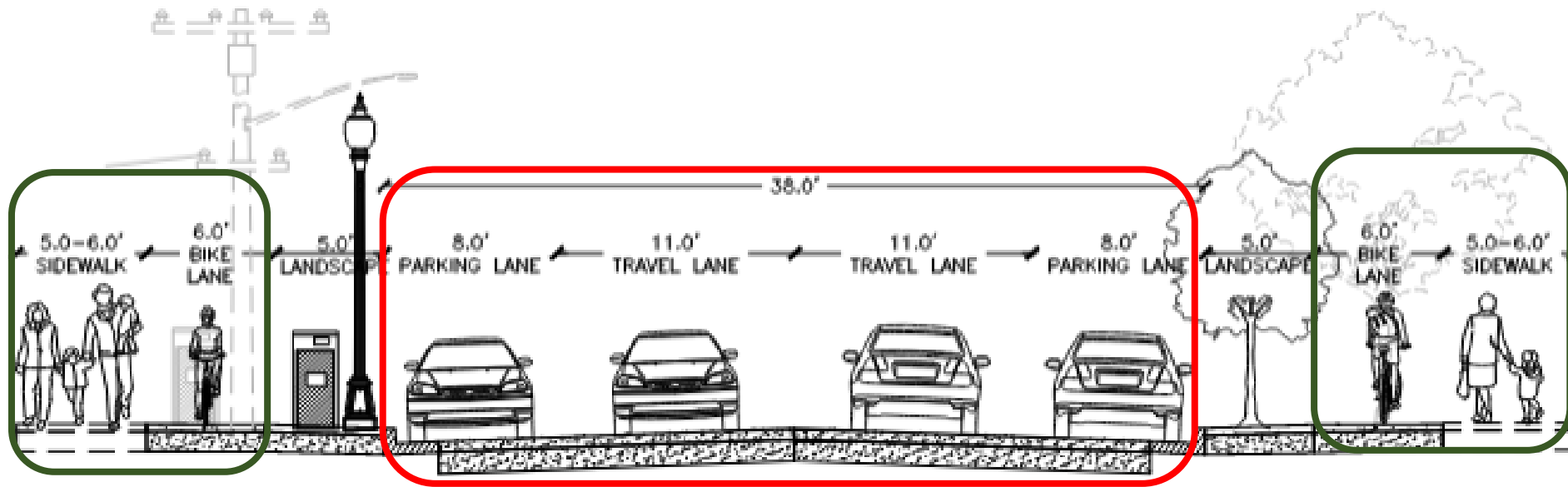
## Pros

- More separation between bicyclists and cars
- Intersection/driveway crossings more intuitive than 2-way bikeway
- Less striping and plastic bollards
- Parking at curbs
- Less parking loss (10-30%) than Council-Approved, but more than Alternative #1

## Cons

- Narrowest bikeways of all Alternatives
- Narrowest curb to curb width (for cars)
- More expensive than Council-Approved and Alternative #1

# Alternative #3: Enhanced Raised 1-way Bikeways



- Moves curb 5' on each side of street (similar to Alternative #2)
- Moves all utilities and replaces mature trees to allow for 1-way bikeways next to sidewalks
- Parking on both sides, at curbs
- Street is reduced from 48' to 38' wide



# Alternative #3: Enhanced Raised 1-way Bikeways

## Pros

- Most separation between bicyclists and cars
- Intersection/driveway crossings more intuitive than 2-way bikeway
- Parking at curbs
- Less parking loss (10-30%) than Council-Approved, but more than Alternative #1

## Cons

- Most expensive of all alternatives
- Takes longest to build
- Removes all mature trees, and replaces with younger, smaller trees



Grand Street with  
mature trees



Bikeway example: Orion St

# Cost Comparison

Design	Cost Estimate	Increase over Council-Approved design
<b>Council-Approved Design</b>		
Segment A: Shore Line to Otis - Fully funded with grant	\$ 1,500,000	
Segment B: Otis to Encinal	\$ 2,970,000	
Segment C: Encinal to Clement	\$ 4,080,000	
Total (Segments B+C)	\$ 7,050,000	
<b>Alternative #1: Raised 2-way bikeway</b>		
Segment B: Otis to Encinal	\$ 5,610,000	\$ 2,640,000
Segment C: Encinal to Clement	\$ 7,720,000	\$ 3,640,000
Total (Segments B+C)	\$ 13,330,000	\$ 6,280,000
<b>Alternative #2: Raised 1-way bikeways</b>		
Segment B: Otis to Encinal	\$ 6,880,000	\$ 3,910,000
Segment C: Encinal to Clement	\$ 9,690,000	\$ 5,610,000
Total (Segments B+C)	\$ 16,570,000	\$ 9,520,000
<b>Alternative #3: Enhanced raised 1-way bikeways</b>		
Total (Segments B+C)	\$ 24,370,000	\$17,320,000

Costs estimates are total costs: construction, design, construction management, escalation, and contingencies.

# Parking Comparison

Design	Percent of Existing Parking Removed
Council-Approved	60-70%
Alternative #1: Raised 2-way bikeway	5-15%
Alternative #2: Raised 1-way bikeways	10-30%
Alternative #3: Enhanced raised 1-way bikeways	10-30%

*Ranges are estimates, and are primarily based on amount of red curb added at driveways, to be determined based on site conditions, best practices and safety.*



# Implementation Timing Comparison

Design	Estimated Year to Begin Construction
Council-Approved	Segments A and B in 2024 Segment C in 2026 (grant funds needed)
Alternative #1: Raised 2-way bikeway	Segment A in 2024 <b>Segment B in 2025 (if all local funds); in 2026-27 (if grant funds)</b> Segment C by 2030 (grant funds needed)
Alternative #2: Raised 1-way bikeways	Segment A in 2024 <b>Segment B in 2025 (if all local funds); in 2026-27 (if grant funds)</b> Segment C by 2030 (grant funds needed)
Alternative #3: Enhanced raised 1-way bikeways	Segment A in 2024 <b>Segment B in 2028-29 (with grant funds)</b> Segment C by 2030 (grant funds needed)

*Timing based on estimates of availability of, and success in securing, grant funds.*

# Summary Comparison

Design	Overview
Council-Approved	<ul style="list-style-type: none"><li>• Parking/bollard-protected bikeways</li><li>• Least expensive</li><li>• Quickest to build of all three segments</li><li>• Most parking loss</li></ul>
Alternative #1: Raised 2-way bikeway	<ul style="list-style-type: none"><li>• More separation between bicyclists and cars; 2-way bikeways less intuitive for all</li><li>• Second least expensive</li><li>• Second fastest to build</li><li>• Least parking loss</li></ul>
Alternative #2: Raised 1-way bikeways	<ul style="list-style-type: none"><li>• More separation between bicyclists and cars, but narrowest bikeways</li><li>• Third least expensive</li><li>• Also second fastest to build</li><li>• More parking loss than Alternative #1, but less than Council-Approved.</li></ul>
Alternative #3: Enhanced raised 1-way bikeways	<ul style="list-style-type: none"><li>• Most separation between bicyclists and cars</li><li>• Most expensive</li><li>• Takes longest to build</li><li>• Most disruptive to neighborhood character</li><li>• Similar parking loss to Alternative #2</li></ul>



# Preliminary Staff Conclusions

- Proceed with Council-Approved design for Segment A: Shore Line to Otis. Construct in 2024.
- Consider recommending Alternative #1 instead of Council-Approved design, to create a continuous 2-way bikeway for the full corridor.
- Drop Alternative #2. More expensive and not as good as Alternative #1, which is less costly and has less parking loss.
- Drop Alternative #3. Too expensive and too disruptive to neighborhood.

# What do you think?

- Tell us during the Open House!
  - Add your comments to posters, fill out comment form
- Staff is available to answer questions
- Participate in future meetings:
  - Virtual Open House (same presentation) – June 13
  - Transportation Commission Meeting – June 21
  - City Council Meeting – July 18
  - All workshop materials and recordings will be posted to project webpage:  
[www.alamedaca.gov/grand](http://www.alamedaca.gov/grand)